



(12) **United States Patent**  
**Bour et al.**

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(54) **HIGH TEMPERATURE TEMPORARY  
DIVERTER AND LOST CIRCULATION  
MATERIAL**

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**43/261** (2013.01)

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(58) **Field of Classification Search**  
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**C09K 8/88**; **C09K 8/512**; **C09K 8/516**;  
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See application file for complete search history.

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(\*) Notice: Subject to any disclaimer, the term of this  
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(21) Appl. No.: **13/326,285**

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61/441,838, filed on Feb. 11, 2011, provisional  
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(51) **Int. Cl.**

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(57)

**ABSTRACT**

A method can include introducing a particulate diverting  
agent into a first fracture within an underground reservoir  
formation. The particulate diverting agent can at least par-  
tially hydraulically isolate the first fracture. The particulate  
diverting agent can also be a temporary material which sub-  
stantially degrades over an extended time. The underground  
reservoir formation can be stimulated with a stimulation fluid  
sufficient to expand a second fracture within the underground  
reservoir formation. The particulate diverting agent can then  
be allowed to substantially degrade.

(52) **U.S. Cl.**

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**19 Claims, 12 Drawing Sheets**

